## **CLAIMS**

- A computer-based system of building virtual network devices, said network devices connected to one or more servers across network communication mediums, said system comprising:
  - a first function device;
  - a second function device;

a remote terminal server, said remote terminal server operatively connected to at least said first and second function devices;

a processing function within said terminal, said processing function including a session which includes discovery, association and registration of at least said first and second function devices, and

said processing function emulating an equivalent network device based on the combined capabilities of said first and second function devices, their inputs/outputs sent and received during said session, and applications of said equivalent network device.

- A computer-based system of building virtual network devices, as per claim 1, wherein said system comprises two or more function devices.
- 3. A computer-based system of building virtual network devices, as per claim 2, wherein said first and second function devices are any from the group: microphone, speaker(s), keyboard, text display, video capture units, video display(s), pointing device(s), and coordinate device(s).

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- 4. A computer-based system of building virtual network devices, as per claim 2, wherein said equivalent network device comprises a virtual telephone comprising four function devices.
- 5. A computer-based system of building virtual network devices, as per claim 3, wherein said four function devices comprise at least a microphone, speaker(s), keyboard and text display.
- 6. A computer-based system of building virtual network devices, as per claim 1, wherein said terminal server processes inputs/outputs comprising system control signaling and RTP data communications.
- 7. A computer-based system of building virtual network devices, as per claim 2, said two or more function devices comprise at least a microphone, speaker(s), keyboard and video display which are associated and registered to build a virtual laptop computer.
- 8. A computer-based system of building virtual network devices, as per claim 2, wherein said two or more function devices include a plurality of video capture devices which are associated and registered to build a virtual closed circuit security system.
- 9. A computer-based system of building virtual network devices, as per claim 2, wherein said two or more function devices include a plurality of video display devices which are associated and registered to build a virtual video on demand system.
- 10. A computer-based system of building virtual network devices, as per claim 2, wherein said terminal server creates any of a: H.323/SIP, H.248/Megaco or MGCP endpoint for said associated devices.

- A computer-based system of building virtual network devices, as per claim 11, wherein said registration registers an alias address comprises any of a: H.323/SIP,
  H.248/Megaco or MGCP URL of said endpoint.
- 12. A computer-based system of building virtual network devices, as per claim 2, wherein said two or more function devices are contained within separate physical structures and are each registered under their own URL.
- 13. A computer-based system of building virtual network devices, as per claim 2, wherein said two or more function devices are contained within a single physical structure and are registered under a common URL.
- 14. A computer-based system of building virtual network devices, as per claim 2, wherein said two or more function devices are connected across wireless networks.
- 15. A computer based method of dynamically building virtual network devices, said devices comprising a plurality of input/output components operatively connected to one or more remote servers over an IP network, said method comprising:

at least one terminal server discovering functional devices connected to said network;

said at least one terminal server binding two or more of said input/output components;

said at least one terminal server registering said bound input/output components and associated communication protocols, and

said at least one terminal server emulating a virtual network device using representative functional applications located on said one or more servers in conjunction with said bound input/output components.

- 16. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said method binds two or more input/output components.
- 17. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said plurality of input/output components are any from the group: microphone, speaker(s), keyboard, text display, video capture units, video display(s), pointing device(s), and coordinate device(s).
- 18. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said virtual network device comprises a virtual telephone comprising four bound input/output components.
- 19. A computer based method of dynamically building virtual network devices, as per claim 18, wherein said four bound input/output components comprise at least a microphone, speaker(s), keyboard and text display.
- 20. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said terminal server processes inputs/outputs comprising system control signaling and RTP data communications.
- 21. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said virtual network device comprises a virtual laptop computer comprising a plurality of bound input/output components comprising at least a microphone, speaker(s), keyboard and video display.

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A computer based method of dynamically building virtual network devices, as per

- 23. A computer based method of dynamically building virtual network devices, as per claim 22, wherein said registration registers an alias address comprising any of a: H.323/SIP, H.248/Megaco or MGCP of said endpoint.
- 24. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said plurality of bound input/output components are registered under separate IP addresses.
- 25. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said plurality of bound input/output components are contained within a single physical structure and are registered under a common transport address.
- 26. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said plurality of bound input/output components are contained within separate physical structures and are each registered under their own transport addresses.
- 27. A computer based method of dynamically building virtual network devices, as per claim 15, wherein said plurality of bound input/output components are connected across wireless networks.